

Amendment and Response

Applicant: DuWayne C. Radke et al.

Serial No.: 09/904,124

Filed: July 12, 2001

Docket No.: M120.199.101 (56908US002)

Title: PASS-THROUGH FIRESTOP DEVICE

REMARKS

These remarks are made in response to the Non-Final Office Action mailed June 2, 2005 in which claims 1-4, 10, 15, 16, 18, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Münzenberger et al., U.S. Patent No. 6,161,873 (“Münzenberger”) in view of McIlroy, U.S. Patent No. 3,995,888 (“McIlroy”). The Examiner’s indication that claims 5, 11-14, 17, and 20, although objected to as being dependent upon a base claim, would be allowable if rewritten in independent form is noted with appreciation.

Claim 21 has been cancelled and claims 1-7 and 10-23 are presented for consideration and allowance.

35 U.S.C. §103

Independent claims 1 and 18, stand rejected under 35 U.S.C. §103(a) as being unpatentable over Münzenberger in view of McIlroy. In general terms, independent claims 1 and 18 relate, in part, to a firestop device for providing a passage through a partition in a structure including at least one frangible connection defining a removable band. For at least the reasons described below, the cited references fail to teach or suggest such limitations.

In the Non-Final Office Action mailed June 2, 2005, the Examiner notes “Münzenberger does not disclose the housing including at least one frangible connection defining a removable band.” NFOA at 3. In order to supply such limitations, McIlroy is cited for a plurality of segmented sections 16 fabricated along pre-cast or scribed frangible lines 16a. *Id.* However, a *prima facie* case of obviousness has not been established as McIlroy is non-analogous art to the present invention. In particular, a *prima facie* case of obviousness cannot be established when the references employed are not in the inventor’s field of endeavor, or reasonably pertinent to this specific problem with which the inventor was concerned. *MPEP* §2141.01.

First, the applicant’s field of endeavor is firestopping, and more particularly, a cast-in-place firestop device for passing cables, pipes, and the like through a concrete partition. *Specification* at pg. 1, ll. 7-9. In direct contrast, McIlroy relates to plumbing and, more particularly, pipe connectors adapted for use with plumbing systems including pipes made of copper, brass, lead, steel, or plastic. *McIlroy* at col. 1, ll. 11-14. Simply put, cast-in-place fire

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stop devices are entirely unrelated to plumbing pipes. Even if the present invention and McIlroy were to be considered in the same broad field, such as building materials or potentially “plumbing systems”, the Federal Circuit case of *In re Clay* indicates that such a tenuous connection between the two fields of invention is insufficient. *See In re Clay*, 966 F.2d 656, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992) (holding the storage of liquid hydrocarbons is in a different field than extraction of crude petroleum, though both are in the “petroleum industry”). Thus, for at least this additional reason, McIlroy cannot be in the same field of endeavor, as any potential overlap in broad industries with the present application does not supply a sufficient relationship.

Second, McIlroy is not reasonably pertinent to the specific problem with which the inventor was involved. While the present invention is concerned with creating a firestop passage through a partition, and adjusting the height of the firestop device to match the thickness of the partition, McIlroy is concerned with creating a flexible pipe connector, and adjusting the inner diameter of the connector to receive pipes having different diameters. *Compare Specification* at pg. 6, ll. 2-5 to *McIlroy* at col. 2, ll. 29-48. Clearly, the problem of flexible connectors capable of adjusting inner diameter is not reasonably pertinent to the problem of adjusting a height, or length, of a firestop device to match a thickness of a partition. Thus, one having ordinary skill in the art seeking to solve a problem of adjusting a height or length of a modular device within a partition would not reasonably be expected or motivated to look to flexible pipe connectors having an adjustable inner diameter.

In sum, it is respectfully submitted that McIlroy is not citable prior art under 35 U.S.C. § 103 as neither factor of the non-analogous art standard has been met. As such, for at least this reason, the rejection of independent claims 1 and 18 as being unpatentable over the cited references is traversed.

Furthermore, in light of the teachings of the cited references, one having ordinary skill in the art would have no reasonable expectation of success combining the cited references, nor would one having ordinary skill in the art be motivated to combine the cited references. *MPEP* §2143.01, .02.

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First, one having ordinary skill in the art would not be motivated to combine the cited references for the reason stated in the Office Action. In particular, the motivation asserted in the Office Action to combine the band 16 of McIlroy with the structure of Münzenberger “in order to provide an easy breaking off end portion which allows for different lengths of the pipes” is not actually taught or suggested by McIlroy. *NFOA* at 3 (citing *McIlroy* at col. 3, ll. 29-34.) The section of McIlroy cited in the Office Action indicates that the frangible line 16a and segmented sections 16 “permits breaking off the end portions 14 to a desired length to match and make a suitable connection to the two pipes being coupled together” *McIlroy* at col. 3, ll. 29-34. However, McIlroy’s motivation is not to adjust length, but to adjust diameter. In order to properly view the McIlroy reference as a whole, the Examiner’s attention is respectfully directed to the section of McIlroy beginning at column 3, lines 45.

The FIG. 2 drawing clarifies the internal construction of the upper one of the two end portions 12. It will be seen that the end portion 12 includes a plurality of similarly sized segmental sections 16. The internal diameter of the end portion 12 includes an inwardly converging tapered internal diameter 26. The tapered internal diameter 26 is capable of handling a broad range of pipe sizes which are illustrated by four different sized pipes A-D.

McIlroy at col. 3, ll. 49-56.

With reference to FIG. 2 of McIlroy, pipes A-D are different diameters not lengths. Clearly, McIlroy only seeks to adjust the internal diameter of the connector, “such that a different diameter pipe can be introduced to achieve a snug fit at whatever length its diameter is accommodated.” *McIlroy* at col. 2, ll. 33-39 (emphasis added). Thus, while the length of the connector 10 might be inadvertently changed, the real purpose and motivation for incorporating the bands 16 is adjusting diameter. As McIlroy’s motivation for incorporating the segmented sections 16 addresses diameter, and not length, a *prima facie* case of obviousness has not been established.

Second, in terms of a reasonable expectation of success, the pipe 7 and jacket 3 of Münzenberger are rigid plastic structures capable of maintaining their integrity when subjected to a cast-in-concrete application. *Münzenberger* at col. 4, ll. 1-2, 13-17. In direct contrast, McIlroy repeatedly teaches that the pipe connector 10 is flexible and distendable. *McIlroy* at

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Abstract (“the pipe connector is fabricated from a deflectable type of plastic material”); col. 1, ll. 49-53 (with pipe connectors according to the present invention...their deflectable nature....); col. 2, ll. 40-47 (“the material of the connector is both flexible and transparent...”); col. 3, ll. 56-63 (“Since the connector 10 is formed of a readily deflectable plastictype [sic] material...”). Clearly, flexibility is requisite according to the structure of McIlroy. In particular, McIlroy teaches that such flexibility allows a pipe D to be introduced into an end portion 12 of the connector 10 such that the pipe will distend the end portion 12 to leave a noticeable ridge or ring, which, in turn, indicates where to tear the flexible structure. *See, e.g., McIlroy at col. 3, ll. 56-67.* While the frangible line 16a and segmented section 16 of McIlroy might work with such flexible and distendable materials, there is no teaching or suggestion as to how such structures would interact with the rigid plastic structures of Münzenberger. In plain terms, tearing flexible, distendable, and deflectable materials is different than tearing rigid plastic materials. As one having ordinary skill in the art is provided no guidance how to effectively incorporate the frangible line 16a and segmented section 16 of McIlroy with rigid structures as taught by Münzenberger, one having ordinary skill in the art would not have a reasonable expectation of success combining the two references.

For at least the reasons described above, the cited references fail to teach or suggest, either alone or in combination, the limitations of independent claims 1 and 18. As such, the rejection independent claims 1 and 18 under 35 U.S.C. §103 is respectfully traversed.

Additionally, McIlroy fails to teach or suggest a pull tab as required by the limitations of at least independent claim 18 and claims 19. In rejecting those claims, FIG. 3 of McIlroy, and in particular, the segmented sections 16 shown separated, and removed from, the connector 10, is cited. *FOA at 3.* Independent claim 18 and claim 19 relate generally, in part, to a pull tab extending radially outwardly from the removable band. The position that the segmented section 16 can serve as both a removable band and a pull tab is untenable with such limitations. In particular, it is impossible that the segmented section 16 extends radially outwardly from the segmented section 16. Thus, for such additional reasons, those claims are further distinguishable from the cited references. As such, they should be allowed for at least such additional reasons.

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Newly presented claims 22 and 23 are also patentably distinct from the cited references for at least the reasons described above. Support for newly presented claims 22 and 23 can be found, for example, at page 7, line 20 to page 8, line 3 and FIGS. 1, 3a, and 3b.

In sum, in light of the above, it is believed that the Examiner's rejection of independent claims 1 and 18 as being unpatentable over the cited references has been overcome. As such, allowance of those claims and notice to that effect is respectfully requested. Claims 2-7, 10-17, 19-20, 22, and 23 depend, in some form, from independent claims 1 and 18. As such, for at least the reasons described above, those claims should also be allowed.

CONCLUSION

In view of the above, Applicant respectfully submits that pending claims 1-7 and 10-20 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-7 and 10-20 is respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 50-0471.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Any inquiry regarding this Amendment and Response should be directed to either David B. Patchett at Telephone No. (651) 736-4713, Facsimile No. (651) 736-3833, or Timothy A. Czaja at Telephone No. (612) 573-2004, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

Amendment and Response

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Serial No.: 09/904,124

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Docket No.: M120.199.101 (56908US002)

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Respectfully submitted,

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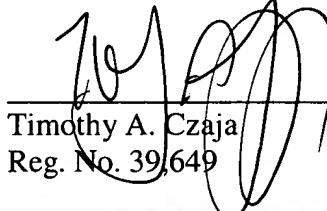
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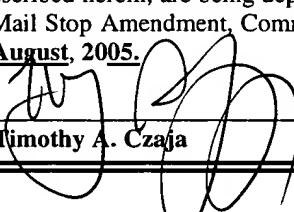


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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 31st day of August, 2005.



By _____
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